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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/528,000  | 03/21/2005  | Noriyuki Kizaki      | Q86432              | 7567             |
| 23373   | 7590        | 08/11/2006           | EXAMINER            |                  |
| SUGHRUE MION, PLLC<br>2100 PENNSYLVANIA AVENUE, N.W.<br>SUITE 800<br>WASHINGTON, DC 20037 |             |                      | MEAH, MOHAMMAD Y    |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1652                |                  |

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

*Supplemental*  
**Notice of Allowability**

Application No.

10/528,000

Examiner

Mohammad Meah

Applicant(s)

KIZAKI ET AL.

Art Unit

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/02/06.
2. ☒ The allowed claim(s) is/are 1-2 and 4.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other corrected Abstract.



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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given by Mark L. Hayman with Telephone on 06/22/2006.

#### **EXAMINER'S AMENDMENT**

**Amend the abstract to a single paragraph as shown in the attached page:**

Claims 5-23 are cancelled.

In claim 2 line 6 replace - ID NO: 2--with--ID NO: 2, wherein said stringent condition comprises washing the filter with 0.1 X SSC solution at 65 °C.

The following is an examiner's statement of reasons for allowance:

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Applicant has isolated a novel recombinant polypeptide of mwt 55000 and SEQ ID NO: 1 from *devosia riboflavina* having activity of stereoselectively reducing N-benzyl-3-pyrrolidinone. As such the claimed polypeptide is novel and non-obvious.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Meah whose telephone number is 571-272-1261. The examiner can normally be reached on 8:30-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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#### ABSTRACT

The present invention provides a novel polypeptide efficiently forming (R)-N-benzyl-3-pyrrolidinol, a polynucleotide coding for said polypeptide, and use of the same. The present invention relates to a polypeptide having the following physical and chemical properties (1) to (4): (1) activity: acting on N-benzyl-3-pyrrolidinone with NADH or NADPH as a coenzyme, to form (R)-N-benzyl-3-pyrrolidinol; (2) optimum PH for activity: 5.5 to 6.0; (3) optimum temperature for activity: 50°C to 55°C; (4) molecular weight: about 55,000 as determined by gel filtration analysis, about 28,000 as determined by SDS polyacrylamide gel electrophoresis analysis. The present invention also relates to a polypeptide comprising the amino acid sequence shown under SEQ ID NO:1 in the sequence listing, a polynucleotide coding for said polypeptide, and a transformant producing said polypeptide at high levels.